CENTRONIC

# PERIPHERALS INFORMATION SHEET

# ZX81 T/S1000

## F.I.Z. Supporting Technical Information.

### TECHNICAL NOTES .....

1. Note that Jumper position (1F) can be found in bottom left hand corner of the Drive PCB Component Locations Diagram.

2. F.I.Z. assumes a single drive system and activates all 3 DS lines, therefore the state of MX Jumper is irrelevant.

3. However, at least one DS Jumper must be shorted or the drive will not be activated and the activity 'Lite' will not light.

4. The exception to 3. above is where both MH and HL are shorted, when the drive will be activated and the Head loaded when the 'Motor On' line is activated.

5. If only the MH is shorted the Head will load on activation of the motor, but the activity 'Lite' will not light in the absense of a DS short.

6. Ideal Jumper configuration ;

| | |
|---|---|
| HS | open |
| DS1 | short |
| DS2 | short |
| DS3 | short |
| MX | short |
| HM | short |

7. The RESISTOR PACK should be in place ..... position 1E

8. The drive functions may be tested by POKING bytes to address 12289 DECIMAL. Bits must be set to activate a line, reset to de-activate, Ø is REST STATE.

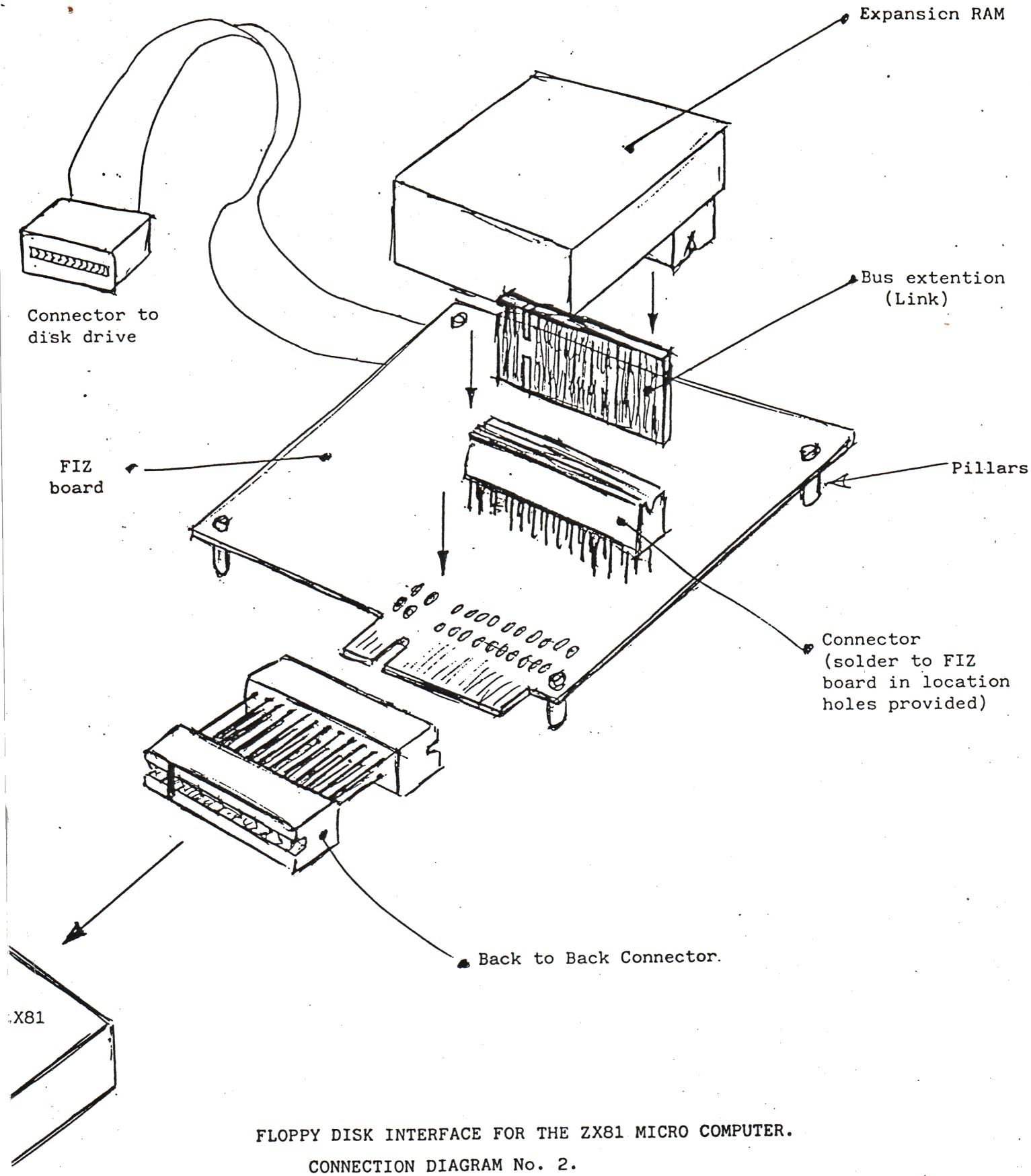
| | |
|---|---|
| B7 | Write Data Enable |
| B6 | Motor On |
| B5 | Write Gate |
| B4 | Direction |
| B3 | Step |
| B2 | Device Select 2 |
| B1 | " " 1 |
| B0 | " " Ø |

e.g. POKE 12289,71 Starts motor & Selects Drive for Read Operation. (47 HEX)

9. On th INPUT side, PEEK 12289 gives results according to the bit pattern :-

| | |
|---|---|
| B7 | Processed Read Data |
| B6 | Not Used |
| B5 | Track Ø |
| B4 | Write Protect |
| B3 B2 B1 BØ | Sector No. Ø to 9 |

10. If you PEEK 12288 with the drive NOT selected or NOT attached (no READ data) then the system will go into an endless WAIT STATE and hang-up. Failure to do this suggests a faulty interface card or strong RF inteference from a nearby TV set.




FLOPPY DISK INTERFACE FOR THE ZX81 MICRO COMPUTER.

CONNECTION DIAGRAM No. 2.

CENTRONIC INC.
1101 Bristol Road
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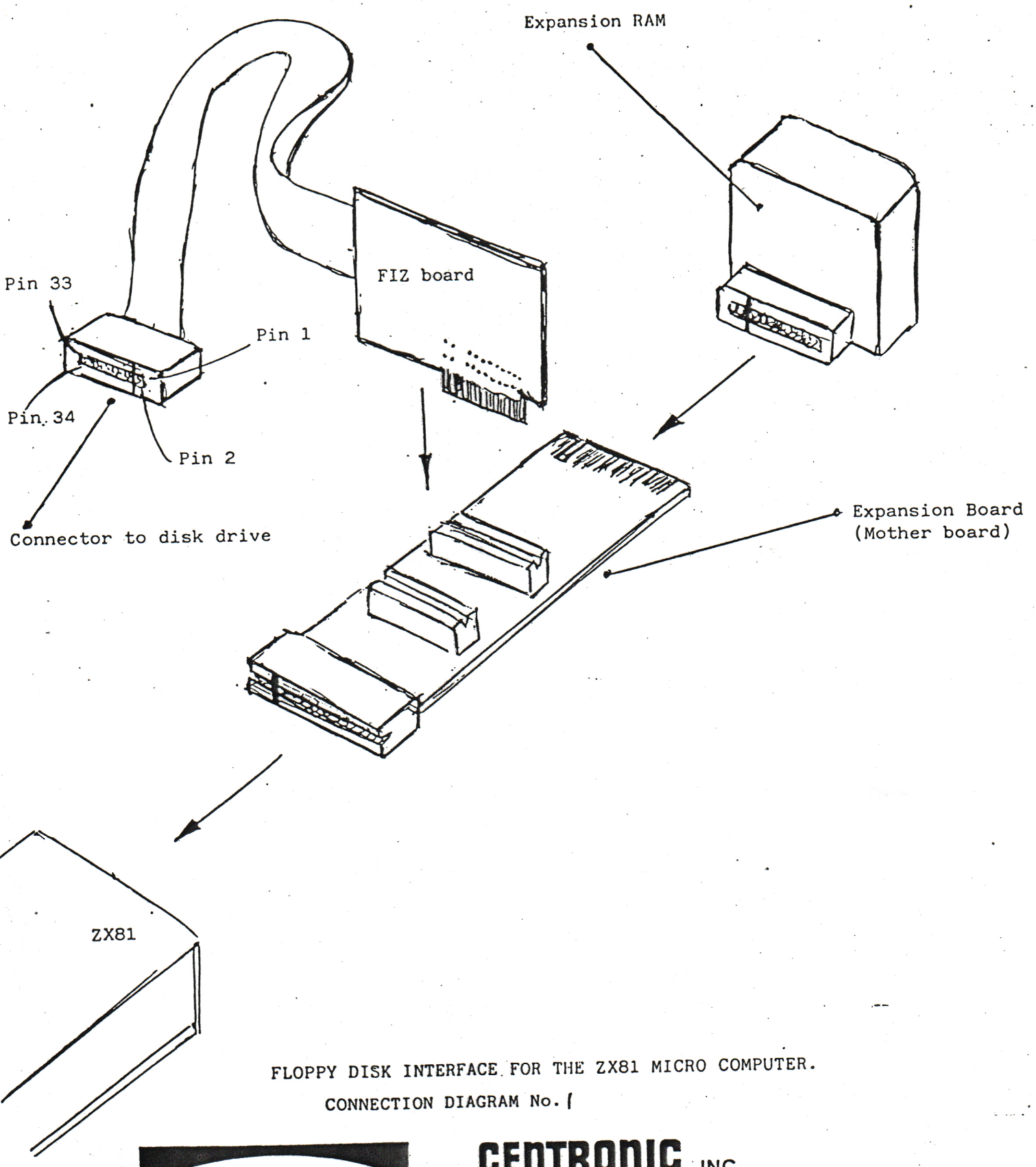
Telephone: (201) 233-7200 • Telex 138275




FLOPPY DISK INTERFACE FOR THE ZX81 MICRO COMPUTER.

CONNECTION DIAGRAM No. 1

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## DRIVE SELECTION

### 1 HEAD LOAD

When the shunt block position HL is shorted the head will load, by energizing the head load solenoid, when drive select is brought to an active low.

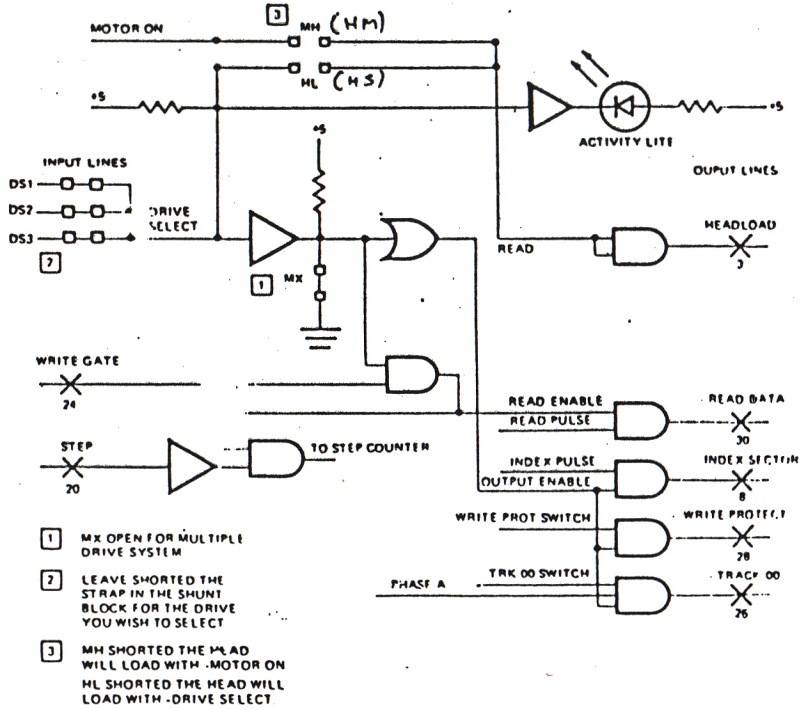
If the shunt block is positioned so HL is open and MH is shorted the head will load with—Motor On signal, irregardless of the state of drive select.

### 2 SINGLE DRIVE SYSTEM

With MX jumper shorted the input to the or gate for output enable is at a low level. This causes the signal output enable to always be true when the drive is powered on. Activating any drive select line will light the activity lite and enable reading and writing if the motor is running and the head is loaded.

### 3 MULTIPLE DRIVE SYSTEM

There are 3 drive select lines. In multiple drive systems leave the jumper uncut in the shunt block for the drive number you wish to select. MX must be cut for the input & output to be daisey chained. With MX cut drive select must be true in order to activate output enable which in turn gates the output lines lites the activity lite and conditions the input lines. Reading and writing can now be performed if the motor is running and the head is loaded.




1 MX OPEN FOR MULTIPLE DRIVE SYSTEM

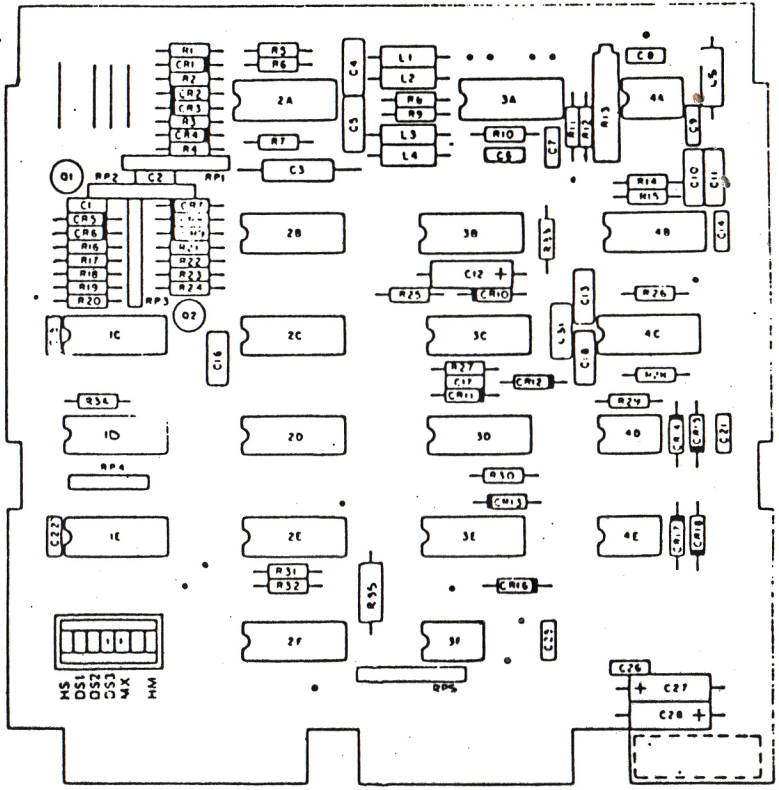
2 LEAVE SHORTED THE STRAP IN THE SHUNT BLOCK FOR THE DRIVE YOU WISH TO SELECT

3 MH SHORTED THE HEAD WILL LOAD WITH -MOTOR ON
HL SHORTED THE HEAD WILL LOAD WITH -DRIVE SELECT

DRIVE SELECT FUNCTIONAL DIAGRAM

## DRIVE PCB COMPONENT LOCATIONS

E.C. 649 TO 692




## SA400 INTERFACE CONNECTIONS